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LOWER DESCHUTES

RECREATION PLANNING REPORT



OREGON STATE OFFICE

FEBRUARY 1971

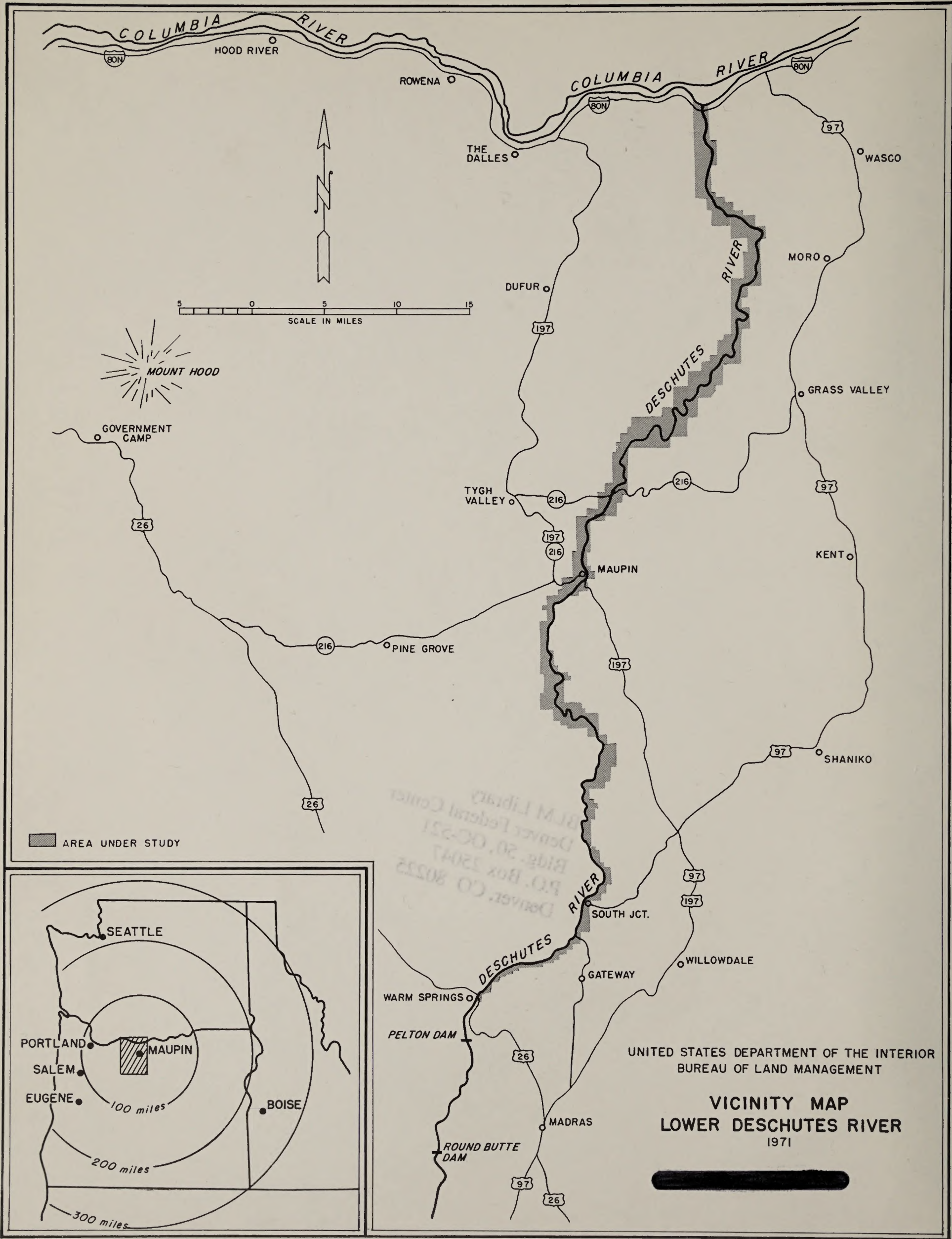
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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VICINITY MAP
LOWER GORGES RIVER

1970



COLUMBIA RIVER

HOOD RIVER

ROWENA

COLUMBIA RIVER

THE DALLES

WASCO

MORO

DUFUR

DESCHUTES RIVER

GRASS VALLEY

TYGH VALLEY

KENT

MAUPIN

PINE GROVE

SHANIKO

SOUTH JCT.

GATEWAY

WILLOWDALE

WARM SPRINGS

PELTON DAM

MADRAS

ROUND BUTTE DAM

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VICINITY MAP
LOWER DESCHUTES RIVER
1971

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LOWER DESCHUTES

Recreation Planning Report

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management

Prineville District, Oregon

February 1971

F O R E W O R D

Oregon's Deschutes River is considered one of the finest trout fishing streams in the United States. Steelhead, Chinook salmon, and other anadromous fish also attract fishermen to the river. The spectacular canyon offers many scenic vistas. Approximately 45 percent of the river frontage along the Lower Deschutes is public land administered by the Bureau of Land Management. The Lower Deschutes is the segment between the Columbia River and the Warm Springs Bridge on U. S. Highway 26.

This report represents the work of BLM specialists in recreation and other resource management fields. Efforts have been made to be exhaustive in regard to all data. To provide maximum information, the report is very specific as to numbers of facilities, use projections and other statistical analyses.

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The daring can reach all stretches of the river by boat. Some rapids are dangerous, requiring white water know-how and special equipment.

I N T R O D U C T I O N

A. PURPOSE OF THIS REPORT

The purpose of this report is to secure public evaluation and comments on the Bureau's recreation development planning for the Lower Deschutes. The views and comments of all interested individuals, organizations and agencies are requested. Please address your correspondence to the District Manager, Prineville District, Bureau of Land Management, P. O. Box 550, Prineville, Oregon 97754, or to the State Director, Bureau of Land Management, P. O. Box 2965, Portland, Oregon 97208.

Because of proximity to the Portland (Oregon) metropolitan area, the Lower Deschutes has great importance to the people of Oregon. Recreationists in large numbers, together with organizations and the information media, have called for access and appropriate development for public use. Previous studies, including inter-agency reports of May 1963 and August 1965, brought out the need to obtain access to public lands along the river and to develop recreational facilities at selected sites on these public lands.

During the past eight years access development has been discussed with numerous organizations. Contacts include the Oregon Wildlife Federation and affiliated clubs, the Izaak Walton League and a number of its chapters, the Jefferson County and Wasco County Courts, the Jefferson County and Greater Central Oregon Chambers of Commerce, the Portland Chamber of Commerce Recreation Committee, the Bureau of Land Management Multiple Use Advisory Board and the Prineville District Advisory Board.

B. OBJECTIVE OF THIS REPORT

The objective of this report is to secure public views for the preparation of a management plan for the Lower Deschutes River.

This report is based on a number of assumptions:

1. To provide a wide range of quality recreation opportunities.
There is a need to maintain a balance between the opportunities for extensive recreation, the room to roam type, and intensive recreation (which requires more elaborate facilities).

Opportunities for a wide range of quality recreation development are possible on the 96 miles of the Lower Deschutes River. This report considers points of public congregation,

opportunities and attractions at various places on the river for high quality or intensive standards and above all the physical suitability of the river and shoreline to provide for the proposed standard of development without deterioration.

2. To maintain a quality fishery. This report has been closely coordinated with the Oregon State Game Commission. That agency has taken steps through catch limitations and other fisheries management practices to insure fishery quality. Fisheries quality has been a primary consideration in the study of all proposed access and types of facilities.
3. To provide public access to all public lands. Most of the access described in the report is existing but owned or controlled by private individuals or organizations. The public is, or may be denied use of public lands until public access rights are secured.
4. To secure the cooperation of others. Fishing and hunting are regulated by the Oregon State Game Commission. Boating and marine matters are regulated by the State Marine Board. The cooperation of various other state agencies, counties, and municipalities is required to carry out a program for the Deschutes. There are also private organizations and individuals who can be of substantial assistance in formalizing and carrying out a plan for the Lower Deschutes. The Bureau plans to consult and cooperate as much as possible with all who are involved.
5. To properly manage the public land. Other uses and resources along the river must be managed to insure compatibility with the primary public recreation use.

C. SUMMARY OF THE REPORT

For purposes of this summary, short term plans are those concerning actions to begin immediately or in the next few years, even though completion may be decades in the future. Long range plans concern actions which will not commence until several years in the future because of need for legislation or other time-consuming requirements. The area has been classified under the Classification and Multiple Use Act of September 18, 1964, for retention in Federal ownership for multiple use management. The Lower Deschutes River was recently designated as a scenic waterway by the 1970 Oregon Scenic Waterways Act.

1. Development Summary - Short Term

a. Public Access (miles)	<u>Road</u>	<u>Trail</u>
Existing	26.6	0
Existing - to be acquired	20.0	0
To be constructed	9.3	24.7
Total Miles	55.9	24.7

b. Recreation Facilities	<u>Existing</u>	<u>Total Proposed</u>
Camping units	87	271
Picnic units	43	129
Boat ramp	1	8

2. Development Summary - Long Range

- a. Acquire scenic easements.
- b. Acquire public foot access along remaining portion of the river not already available.
- c. Seek to acquire certain tracts of private land for facility development.
- d. Provide additional recreation facilities as necessary to meet public demands commensurate with preserving the quality of the recreation experience. Analyses indicate that the following facilities could be added:

Public road (miles)	2.1
Trail access (miles)	13.3
Camp units	100
Picnic units	50
Boat ramp	1

3. Development Costs - Short Term

Included below are the estimated development costs as of December 1970. These estimates cover all the proposed development opportunities discussed for each segment in Section III of this report: Development Opportunities, Short Term.

a. Access

Survey and design, and program services	\$ 119,000	
Easement acquisitions - roads and trails	236,000	
Road construction and improvement	1,985,000	
Trail construction and improvement	<u>134,000</u>	
Sub Total		\$2,474,000

b. Recreation Site Construction

Survey and design, and program services	\$ 440,000	
Construction	<u>3,512,000</u>	
Sub Total		\$3,952,000

c. Maintenance \$ 851,000

d. Building Construction \$ 99,000

e. Indirect Costs \$ 270,000

Total Estimated Costs \$7,646,000

SECTION I - DESCRIPTION OF THE AREA

A. LOCATION AND DESCRIPTION

The Lower Deschutes is located in north-central Oregon and lies in the rainshadow of the Cascade Mountains. Mount Hood and Mount Jefferson are the prominent topographic features. The region's topography varies from flat to rolling to mountainous. The area is dissected by the Deschutes River, which flows northward into the Columbia River. The Deschutes River has formed a canyon 1,000 to 1,500 feet deep.

B. GEOLOGY

The geology of the northern one-third of the area consists mainly of Columbia basaltic flows, which have a depth of over 1,000 feet. These basaltic flows are overlain with loessial deposits which provide soil ideal for growing cereal crops. Geology of the southern two-thirds is quite varied, having basaltic flows mixed with sedimentary deposits and ancient volcanic extrusions. Topography here is rugged and mountainous. The varied geology of the area, coupled with changing topography, provide outstanding scenic attractions for the recreationist.



August and September are the best months for Deschutes River steelhead and Chinook salmon.



Rugged canyons and the ^{quickly} ~~quiet~~, meandering river are as enticing
to the sightseer and photographer as to the fisherman.

C. PHYSIOGRAPHY

1. Climate

The climate of the study area is characterized by warm, dry summers and cold, comparatively moist winters. During the season of maximum recreation use (April to October), the area experiences dry, warm climate with maximum daytime temperatures ranging from 70° to 115° F. There is a difference of plus 5 degrees in the mean temperatures on the flat tablelands above the canyon rim. The milder climate in the river canyon extends the season of recreation use by one or two months as compared to other Oregon recreation areas.

2. Topography and Soils

The topographical features of the region are quite variable, ranging from mountainous to fertile uplands to a deep river gorge. The Deschutes River intersects the study area at an elevation of approximately 1,400 feet, and flows north to its confluence with the Columbia River where its elevation is 160 feet. The surrounding tableland plateau varies in elevation from 2,300 feet to 1,500 feet near the Columbia River.

A wide variety of soils exists through the region. In the southern portion, soils may vary from sandy to sandy loams developed from either weathered basalt or alluvial material. Soils in the northern portion of the region vary from very fine sandy loams and loamy sands to silt and clay loams.

3. Vegetation

Vegetation consists of a sagebrush-grass type in the northern portion and a juniper-sagebrush-grass type in the southern portion. Grass cover increases near the Columbia River. As the grass types increase, the juniper and sagebrush types decrease. Vegetation adjacent to the Deschutes River has been reduced to annual grasses and forbs as a result of overgrazing and fire. Farther up the slopes the vegetation changes to bunchgrass in the open areas and thickets and various browse species in the smaller canyons. Trees native to the canyon are western juniper, thinleaf (mountain) alder, hackberry, Oregon white oak, willow and an occasional ponderosa pine.

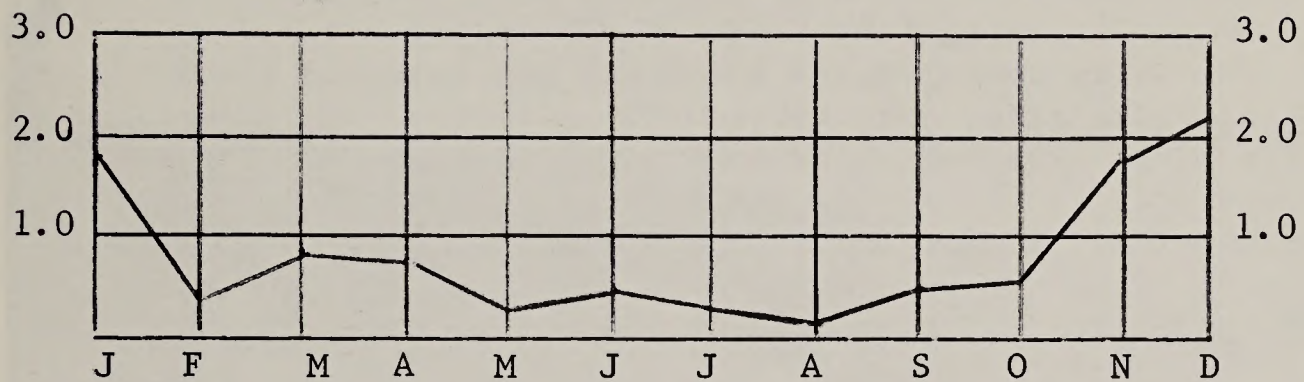
4. Hydrology

The flow of the lower Deschutes River remains almost constant due to the upstream regulating dams. This provides consistently

5-YEAR AVERAGE
PRECIPITATION AND TEMPERATURE RECORDS
OF 4 WEATHER STATIONS IN
NORTH CENTRAL OREGON

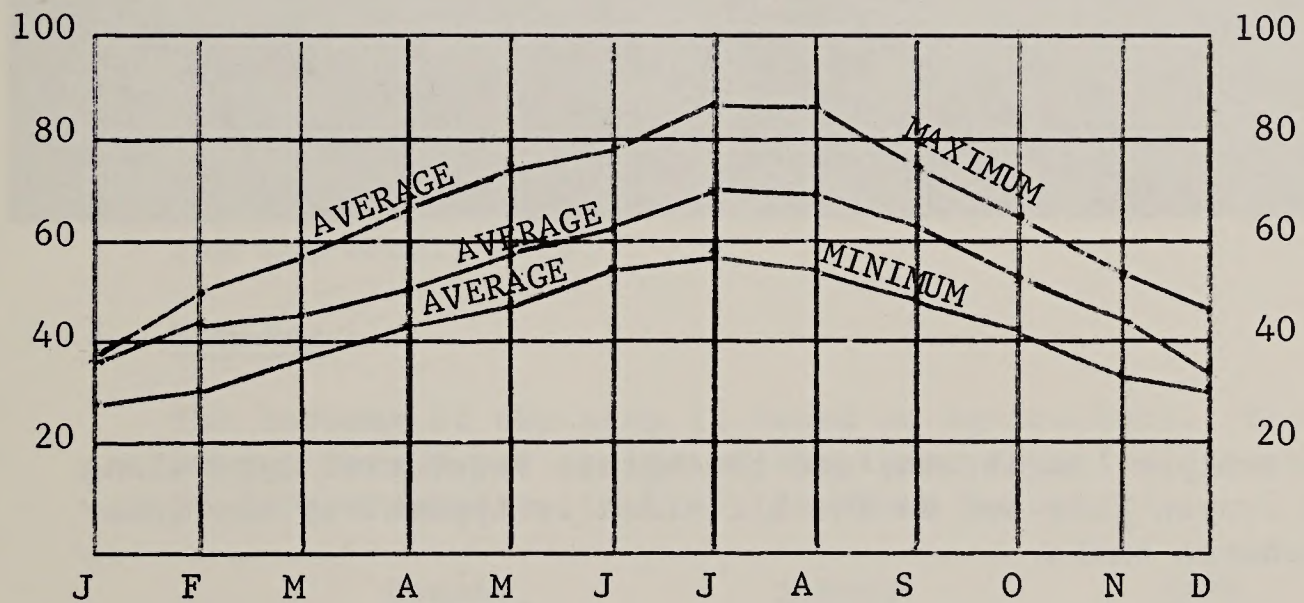
(DUFUR, MORO, PELTON DAM, THE DALLES)

Inches Precipitation



Average Monthly Precipitation
(Average Annual Precipitation: 10.47 inches)

Degrees Fahrenheit



Average Monthly Temperatures



The juniper, sagebrush, and bunchgrass vegetative type along the canyon rims and on the hillsides is typical of the lower Deschutes basin.

cool water temperatures and, consequently, ideal habitat for rainbow trout and anadromous fish. Numerous springs also contribute to the river's low water temperature and quality.

Potable water of suitable quality is believed to be readily available along the river. The BLM has water developments at Macks Canyon and Beavertail Recreation Sites and at Gray Eagle Springs. There are numerous other water developments for domestic use and other purposes.

The allowable uses of water from the Deschutes River have been explicitly decided in a series of legal acts and decrees by the State Engineer and the State Water Resources Board. From its mouth to river mile 100 the unappropriated waters are set aside solely for domestic, livestock, recreation, fish, and wildlife purposes. Between river mile 100 and 120, plus the lower 13 miles of the Metolius River, hydroelectric power has been added to the aforementioned list of recognized uses. Above Bend the river waters were withdrawn as early as 1913 for only irrigation, domestic, and power uses. It is significant to note that no allowance has been made for industrial uses of unappropriated waters from the Deschutes River.1/

D. SOCIO-ECONOMIC DATA

1. Population

All of the towns located in north-central Oregon have small populations. Total population for the tri-county area in 1965 was 36,500. Projections indicate that the resident population will increase, reaching 63,500 in the year 2000. This growth rate approximates 12 percent per decade.

The major source of recreationists is not expected to be from the tri-county area.

2. Economy

The economy of the area is based on agriculture. The effective buying income per capita of the three counties, compared to the 36 Oregon counties in 1965, is shown below: 2/

<u>County</u>	<u>Income</u>	<u>Rank</u>
Sherman	\$2,801	1
Wasco	2,200	13
Jefferson	1,827	32
State Average	2,369	

Employment in north-central Oregon showed a 29 percent increase from 1940 to 1950 and an 18 percent increase from 1950 to 1960. However, during these two decades, agriculture-based employment decreased 21 and 18 percent, respectively. ^{3/} Data show other new service-oriented industries in the region are absorbing and, in fact, over-riding decreased employment in agriculture during the past two decades.

With the exception of The Dalles, the outlying communities of Wasco, Moro, Kent, Dufur, and Grass Valley are supported by the relatively stable pursuits of wheat farming and livestock grazing. Timber product processing is the principal industry of Tygh Valley, Maupin, and Warm Springs.

3. Traffic

Traffic is also an indicator, particularly off main arterial routes, of recreation need. It indicates the user "population" during the recreation season.

Average daily traffic counts on north-central highways show vehicle traffic peak season of use corresponds directly with the recreation season. Average increase in traffic on these highways was approximately 14.3 percent for the period 1956 to 1967. ^{4/}

E. LAND OWNERSHIP AND USE

The following tabulation shows ownership of river frontage. The Lower Deschutes includes 96 river miles, so for practical purposes we have 192 miles of frontage to consider.

River Frontage (Both east and west banks)

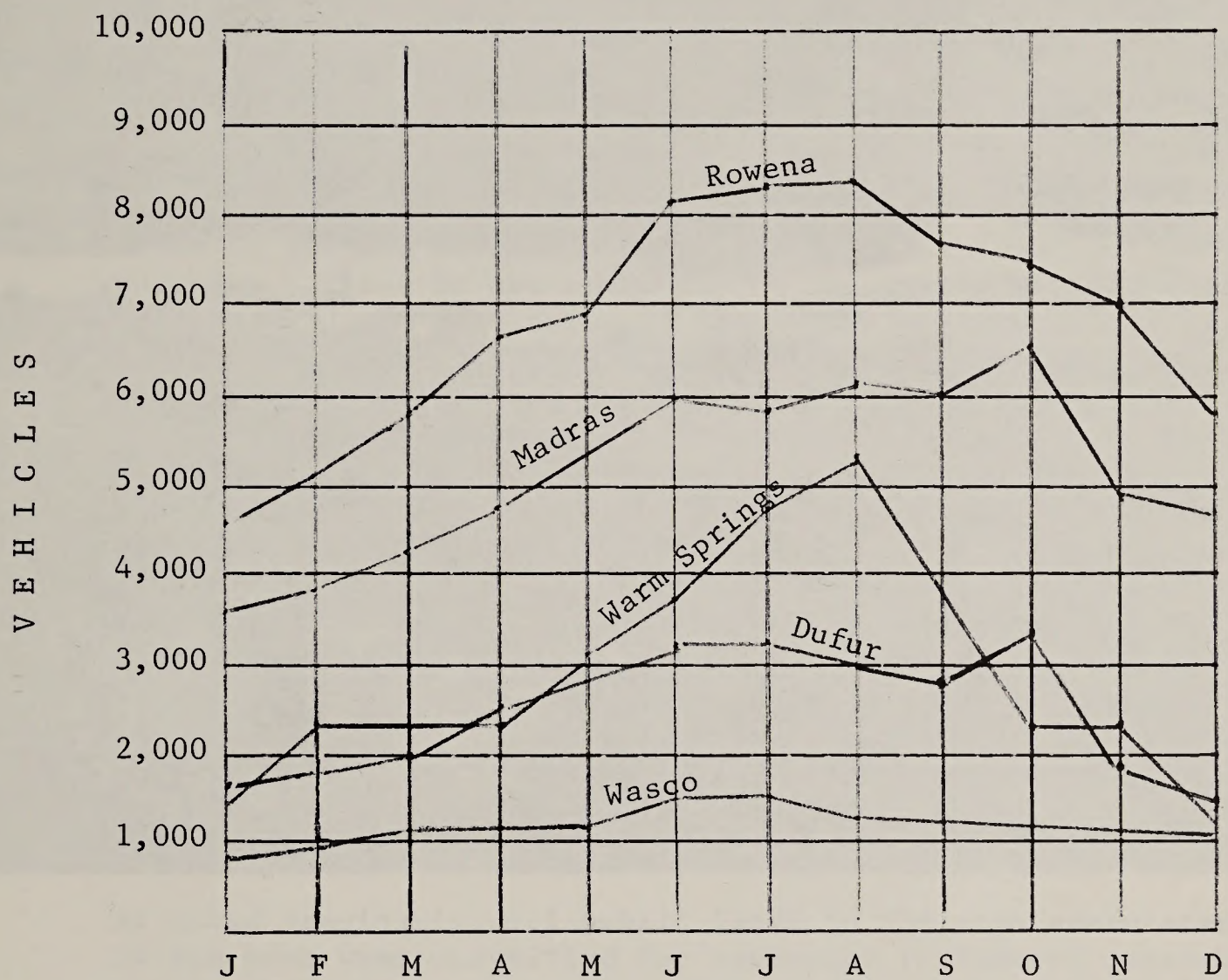
Warm Springs <u>Indian Reservation</u>		<u>Public Lands</u>		<u>Private Lands</u>	
<u>Miles</u>	<u>Percent</u>	<u>Miles</u>	<u>Percent</u>	<u>Miles</u>	<u>Percent</u>
29	15	86	45	78	40

For specific location of the tracts in these ownerships, see maps in Section III.

1. Warm Springs Indian Reservation

The Warm Springs Indian Reservation fronts on 29 miles of the river along the west bank. Indian rights are protected by

AVERAGE DAILY TRAFFIC - 1967



Source: Technical Report No. 68-1
 Oregon State Highway Department
 Traffic Volume Tables for 1967.
 July 1968.



Indians from the Warm Springs Reservation fishing the river
at Sherars Falls, just above Sherars Bridge.

treaties dating back to 1855. Such rights may not be affected by public projects without consent of the Indians.

The Warm Springs Indians have a recreation and tourism development program. One well known result is the KAH-NEE-TA Resort, which includes hot spring baths and varied accommodations, all of the highest quality. The Tribal Council allows public fishing along a portion of the Warm Springs River as part of this program; they also allow fishing by permit on other parts of the reservation including the Deschutes River from Dry Creek to the Wasco County line.

General recreation development along the river should bring more recreationists to the area and prolong their stay.

2. Private Lands

Lands in private ownership along the river are used for many purposes. There is one community on the west bank, Maupin, which had a 1960 population of 381. Warm Springs is on the Indian Reservation and has a population of approximately 1,850 people. There are a few businesses at Rainbow on the east end of the Warm Springs Bridge (U. S. Highway 26) and a few nearby homesites. Otherwise population along the river is scattered, with here and there a vacation cabin or dwelling on a river flat or a few buildings clustered together.

Basic uses of private land are homesites, vacation cabins, and a very few farms. There is some light industry at Warm Springs and Maupin; most conspicuous are forest product industries. Private lands are grazed by livestock. Less than 80 acres of private river flat is irrigated for pasture land or hay.

3. Public Lands

As noted previously, all public lands in the area administered by BLM have been classified for retention in Federal ownership for multiple use management. They are all under grazing leases, in accordance with Section 15 of the Taylor Grazing Act of 1934, as amended.

Approximately 55 percent (15,861 acres) of the public lands ~~are~~^{is} withdrawn by various Executive Orders for powersite purposes. The Federal Power Commission has, in the past, fully cooperated with the Bureau of Land Management to provide for multiple use management of these withdrawn lands. So far as can be determined there are no power projects currently under study or investigation on the lower 96 miles of the river.

Recreation, the major use of the public lands, is covered in detail later.

4. Rights-of-way

An operating railroad, the Burlington-Northern (formerly Spokane, Portland & Seattle) has mainline tracks on the west bank for seventy miles, then on the east bank for an additional 18 miles. As many as 20 trains daily may use the route. The presence of the operating railroad and the railroad right-of-way is important. It limits the use potential of the west bank. An informal contact with the SP&S, the predecessor of Burlington-Northern, indicates that 622 fishermen gained access to points along the Deschutes via train in 1969.

There are other rights-of-way on the Lower Deschutes which affect use of the area. U. S. Highway 26 parallels the river for one and one-half miles above Warm Springs on the east bank. As a result of excellent access, the bank between the river and the highway at this point is frequently overused. Sherars Bridge, where State Highway 216 crosses the river, is similarly overused. If the public is to use a privately owned right-of-way, such rights must be acquired.

F. RESOURCE USE

1. Livestock Grazing

At the present time 25 ranches are dependent to various degrees on the Lower Deschutes River public lands for livestock forage. The public lands provide some 4,240 cattle with 19 percent of their annual forage requirements, 2,636 AUMs. The balance is provided by other ownerships.

Due to the topography of the area and the fragmented land pattern it has been difficult to regulate livestock use. Vegetative conditions along the river are poor to fair. Intensive management complemented by land treatment measures are needed to restore range conditions.

Range uses under proper management are not an important conflict with use of other resources along the Deschutes. Actual facility installations may sometimes require fencing. Appropriate cattle-guards are necessary.

2. Minerals

Mining activity in the Deschutes River canyon has been limited primarily to the collection of semi-precious gems. The only

known commercial mining in the Deschutes River canyon was done by Dant & Russell. The company had its perlite mining operation on the west bank of the Deschutes River in the 1940s and 1950s, where it established a small community called Dant 11.4 miles upstream from Maupin. At present, there are no active mining operations in the study area.

3. Recreation

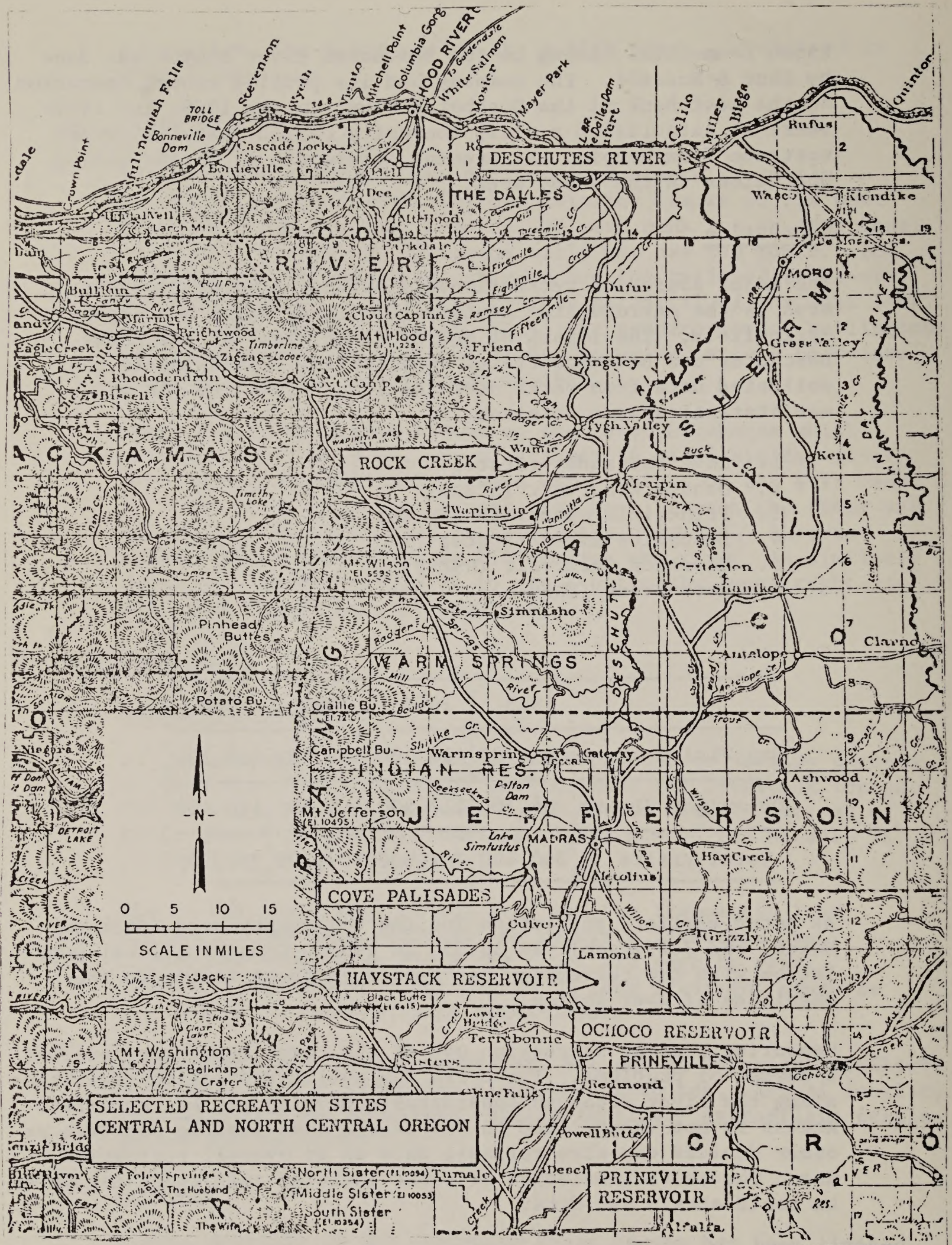
The major source of recreationists using the Lower Deschutes area is the metropolitan centers, Portland, Salem and Eugene-Springfield. The impact of metropolitan areas on the Lower Deschutes can be demonstrated empirically. Following is consolidated data from parks near the Lower Deschutes for which use statistics were obtained. 5/

1. Cove Palisades (State)
2. Ochoco Reservoir (State)
3. Prineville Reservoir (State)
4. Deschutes River (State)
5. Haystack Reservoir (USFS)
6. Rock Creek (USFS)

	1965	1966	1967	1968
Day Visits	445,700	614,100	689,100	637,100
Overnight Visits	94,700	117,500	110,500	120,400
Total Visits	540,400	731,600	799,600	757,500

As noted earlier, population for the tri-county area (Sherman, Wasco, and Jefferson) was 36,550 in 1965. Comparing local population with the recreation use tabulated above indicates the magnitude of user influx.

Measuring present recreation use of the Lower Deschutes involves a number of problems. There are few public recreation facilities along the river although considerable development has occurred. Access is not channelized to the degree that traffic counters or other devices can give reliable data as to overall recreation use. The above tabulation of parks included only those for which we could obtain use data.





Sherars Bridge on State Highway 216. The pictured area is private land and has no sanitary facilities. See Proposed Developments, page 48.

BLM has two recreation sites on the river stretch from Sherars Bridge to Macks Canyon. These sites are named Beavertail and Macks Canyon. These sites received nearly 20,000 visits in 1968. The procedure followed to determine a present-use estimate for the river involved an area by area review of all available pertinent data. Included were Oregon State Highway Department, County and BLM traffic counts, an Oregon State Game Commission field census, and consultation with agencies, organizations and individuals with an intimate knowledge of river use. The resulting estimate is 257,630 recreation visits in 1968 to the Lower Deschutes area.

Under Federal executive policy governing the reporting of recreation use of Federal Recreation Areas, the "Recreation Visitor-Day" is an important statistical unit, used for several analysis purposes. A visitor-day is the presence of one or more persons on lands or waters for continuous, intermittent or simultaneous periods of time aggregating twelve hours. Visits for recreation purposes to the Lower Deschutes have been analyzed as to average duration, resulting in an estimate of 133,000 recreation visitor-days use of the Lower Deschutes in 1968.

SECTION II - RECREATION EVALUATION

A. THE PACIFIC NORTHWEST AND OREGON

1. The Pacific Northwest Region

The ever-increasing demand for outdoor recreation exists in the Pacific Northwest region as in all regions of the United States. However, the potential for recreational development outside of cities is greater in the Pacific Northwest than in any other region. This potential is caused by the very high ratio of public-to-privately owned lands, relatively low population levels, and prime outdoor recreation attractions.

The importance of outdoor recreation to the Pacific Northwest has been documented in many recent studies. Included are those published by the Battelle Memorial Institute, 6/ The Bonneville Power Administration of the U. S. Department of the Interior, 7/ and the State of Oregon Highway Department. 8/

2. State of Oregon

In 1966, fifty-four percent of Oregon's total travel expenditure originated from out-of-state revenue. Seventy-three percent of Oregon's out-of-state visitors originated from neighboring California, Washington, and Idaho.

Oregon's outdoor recreation potential is gaining attention. Tourism is and will continue to be a major source of income to the State. In 1960, out-of-state visitors totalled more than six million. In 1975, Oregon should be visited by fifteen million recreationists. 8/

The tourism industry ranked fourth as an employment source in Oregon in 1967. In 1966, Oregon had 35.8 percent of the Pacific Northwest tourist employment, although it had only 32.2 percent of the region's population.

Oregon's population was 1,768,687 by the 1960 census. In 1975 it is projected to be 2,415,537, a significant 36.6 percent increase. A combination of factors has caused an increasing demand for outdoor recreation by Oregonians. These factors are: 8/

- a. Increased available income. Median family income for the State is projected to increase 82.7 percent between 1959 and 1975 (\$5,892 and \$10,765).
- b. Increased leisure time. Off-work time of employed persons in Oregon will have increased 84.9 percent between 1960 and 1975. This increase represents actual work time converted into paid leisure time.
- c. Increased mobility. Between 1960 and 1975 the number of light vehicles per 1,000 persons will change from 471 to 548. This reflects an 11.6 percent increase in vehicles which, in turn, will reflect a 16.6 percent increase in recreation miles traveled.

From these figures a Time-Income-Mobility factor of 3.9 percent annual increase in numbers of recreationists has been derived. This factor, added to annual rate of population increase, and annual rate of tourist increase indicates the magnitude of recreation growth in the State.

The population centers in the state are a major factor affecting the Deschutes River. Oregon has three major urban areas--Portland, Salem and Eugene. In 1965 there were three major divisions of resident population, the three metropolitan areas with 1,142,056, the rural areas with 698,000 and the small urban places with 142,728. 8/ The three metropolitan areas are located within the most rapidly growing section of the state. It is estimated that 60 percent of all new population increase will occur in the northwest part of the state in the Willamette Valley and around the metropolitan areas. 8/



There is an increasing number of power boats and pickup campers being used by recreationists in the Deschutes River area.

The Lower Deschutes lies within 100 air miles of all three metropolitan areas. Excellent access to the metropolitan areas is provided by Interstate Freeway 80N, U. S. Highways 20, 22, 26, 97, 126, 197 and by State Highway 216.

The Lower Deschutes will be subject to enormous use-pressure in the immediate future. The nine counties which comprise major portions of the Willamette Valley will increase in population by 57.2 percent from 1960 through 1975. 8/ Applying the Time-Income-Mobility factor of 3.9 percent plus the Willamette Valley population increase rate shows 7.7 percent annual growth rate in potential usage from metropolitan pressure alone.

Tourism into Oregon is increasing approximately six percent per year, from over six million in 1960 to a projected 15 million in 1975. 8/ The relatively undeveloped Lower Deschutes area is probably not receiving a heavy percentage of this use at the present time. However, this proposal, if implemented, would undoubtedly increase the present percentage of out-of-state users.

Population of the tri-county area is increasing approximately 1.2 percent per year, projected to reach 44,041 in 1970. 8/

B. ATTRACTIONS

The following is a brief description of the varied recreation opportunities and attractions on the Lower Deschutes River:

1. Fishing

Rainbow trout, steelhead trout and Chinook salmon are the principal fish species caught on the Deschutes River.

In the river stretch from the Columbia River to Macks Canyon, the season of highest recreational use coincides with the migration of summer and fall steelhead and spring Chinook salmon. Excellent catch ratios attract anglers into this area during the late summer and early fall. While steelhead offer the main attraction, rainbow trout are also caught.

In the Macks Canyon to Sherars Bridge stretch, summer steelhead and spring Chinook salmon angling are the most popular. While steelhead are taken throughout the area, salmon angling is best in a one-mile area below Sherars Falls. Anadromous fish are temporarily hindered here in their upstream passage and are, thus, more susceptible to angler pressure.



Deschutes steelhead are famous fighters.



The jet boat, drawing only inches of water, is a common sight on the Deschutes.

The river stretch from Sherars Bridge to a point adjacent to the locked gate on the road seven miles above Maupin offers a rainbow trout fishery that provides approximately 50,000 angler trips annually and produces a catch of over 80,000 rainbow trout. Sixty-four percent of the trout caught in this area in 1968 were native trout. The balance were hatchery rainbows.

An Oregon State Game Commission News Release of June 9, 1969 states:

"Would you believe that a 15.2-mile section of the Deschutes River produced almost 79,400 game fish for anglers?

"This is the production record for the Maupin-White River section of the Deschutes as revealed by an intensive angler survey made last summer during the regular trout fishing season. The small area studied is one of the primary trout fishing sections in the lower 100 miles of stream.

"The catch averages out at about 5,300 game fish per mile of fishing water and certainly upholds the Deschutes reputation as being one of the finest trout streams in the west."

The Kaskela to Rainbow stretch is also an outstanding rainbow trout fishery which receives only slight angler pressure at this time.

2. Boating

Power boats, drift boats and rubber rafts are used by anglers who fish the river where road access does not exist. They are also used by the "white-water" enthusiasts who like to run the many rapids. Drift boats are usually of the "Rogue River" or "McKenzie River" type. Boats and rafts are used on all portions of the Lower Deschutes. Present State regulations prohibit angling from boats on the Lower Deschutes River, therefore, boats provide access but the angler must beach the boat before fishing.

Use of boats will undoubtedly increase at a rapid rate if more access points and boat ramps are developed.

3. Sightseeing and Photography

The Deschutes River canyon has many scenic areas. However, inadequate access critically limits the general public from



Most drift boats on the Deschutes are of the "McKenzie"
or "Rogue River" types.

enjoying the public lands. Changing colors and shadows on the steep canyon walls, the variety of wildlife and flowering plants found in early spring and summer attract both the amateur and professional photographer.

4. Hunting

Big game, upland game and waterfowl are found in the study area. Mule deer are hunted in the main canyon and in the many tributary canyons. These canyons are well known for their abundance of upland game, especially the chukar partridge. Valley quail, Hungarian partridge and pheasant are less prevalent in the canyon, but are found in varying numbers on private agricultural lands or adjacent public lands above the canyon rim. Ducks and geese are hunted on the river.

5. Rockhounding

Rockhounding in Central Oregon attracts people from all over the United States. Various semi-precious gems such as geodes, thunder-eggs, agates, Wascoite, and petrified wood have been found in the Deschutes River canyon. Wascoite and petrified wood are found in the area between Sherars Bridge and the Columbia River. Geodes, thunder-eggs and agates are found in the area from Maupin to Trout Creek.

6. Nature Study

The Deschutes River canyon provides an excellent outdoor wildlife laboratory where observations can often be made of shore birds, migratory waterfowl, upland game birds, predatory birds and song birds. There are several great blue heron rookeries in the canyon. Other wildlife include the mule deer, raccoon, muskrat, mink, opossum, otter, skunks, western jackrabbit, coyote and several species of snakes.

The Deschutes canyon also provides a myriad of flora such as lichens, algae, mosses, forbs, woody plants and trees. Cedar Island has generated interest from botanical groups. This island is located about 10 miles downstream from Sherars Bridge and has a small stand of incense-cedar. It is the only place where incense-cedars can be found in the Deschutes River canyon. Flowering plant life is at its peak in late April and early May.

7. Historical Events

The first written record of the Deschutes River was made by the explorers Lewis and Clark in October 1805. Peter Skene Ogden



University of Oregon archeologists excavating ancient "House Pits" at Macks Canyon. The site is being protected by BLM from disturbance by unauthorized persons.

crossed the river near its mouth in 1825 and again in 1826 near the present location of Sherars Bridge. Other explorers whose activities brought them to the river were Nathaniel Wyeth in 1834 and John C. Fremont and Kit Carson in 1848. The historic lost Meeks Wagon Train crossed the Deschutes River near Buck Hollow Creek in 1845.

The years 1909 to 1911 witnessed the construction of two railroads; one on each bank of the Deschutes River. Many articles have documented the race to provide rail transportation from the Columbia River to California. The Oregon Trunk line on the east bank was abandoned from Trout Creek to the U.S. Highway 26 bridge near Warm Springs in 1923. The Des Chutes Railroad line on the east bank was abandoned in 1935 from the Columbia River to North Junction. An operating railroad now exists on the west bank from the Columbia River to North Junction. It then bridges the river and continues on the east bank to Trout Creek. From Trout Creek the railroad leaves the river canyon and proceeds up a steep grade to Gateway, Madras, Bend and points south.

8. Archeology

It is evident that people have occupied the Deschutes River canyon for thousands of years. According to David L. Cole, Curator of Anthropology, Museum of Natural History, University of Oregon, the Lower Deschutes River was used by man as early as 5000 B.C. 9/

An archeological site at Macks Canyon approximately 23 miles upstream from the Columbia River has been excavated by the University of Oregon under contract from the Bureau.

Artifacts and other objects of antiquity of scientific importance are protected from disturbance by Federal Law and may not be collected or disturbed by private citizens on public lands. However, the excavations are a matter of interest to the public. Those at Macks Canyon are fully visible, being enclosed by ^a protective fence. [^]

C. ACCESS

"Access", for the purpose of this report is defined as the legal right of the general public of ingress and egress across private or other public land to lands administered by BLM

1. Roads

Existing road access on the east bank of the Lower Deschutes River is limited primarily to the 25-mile portion of the BLM Deschutes River access road between Maupin and Macks Canyon. Two other small areas of the river canyon are also accessible by road to the public. These are the South Junction area and the Gateway site near the mouth of Trout Creek. Both of these undeveloped recreation sites are accessible by county roads, and are used extensively during the fishing season.

Only two points of road access are known on the west bank of the river: (1) The Freebridge County Road to Kloan (a one-point riverfront access), and (2) Ferry Canyon County Road to Sinamox (three-quarter mile riverfront access).

At present, only 32 miles of the 96 miles on the east bank of the river are open to public road access. Some areas are subject to "parking fees" by landowner or lessees. Other areas are subject to privately controlled "one-day walk-ins" and in still other areas, access to the abandoned railroad grade and the river is prohibited altogether.

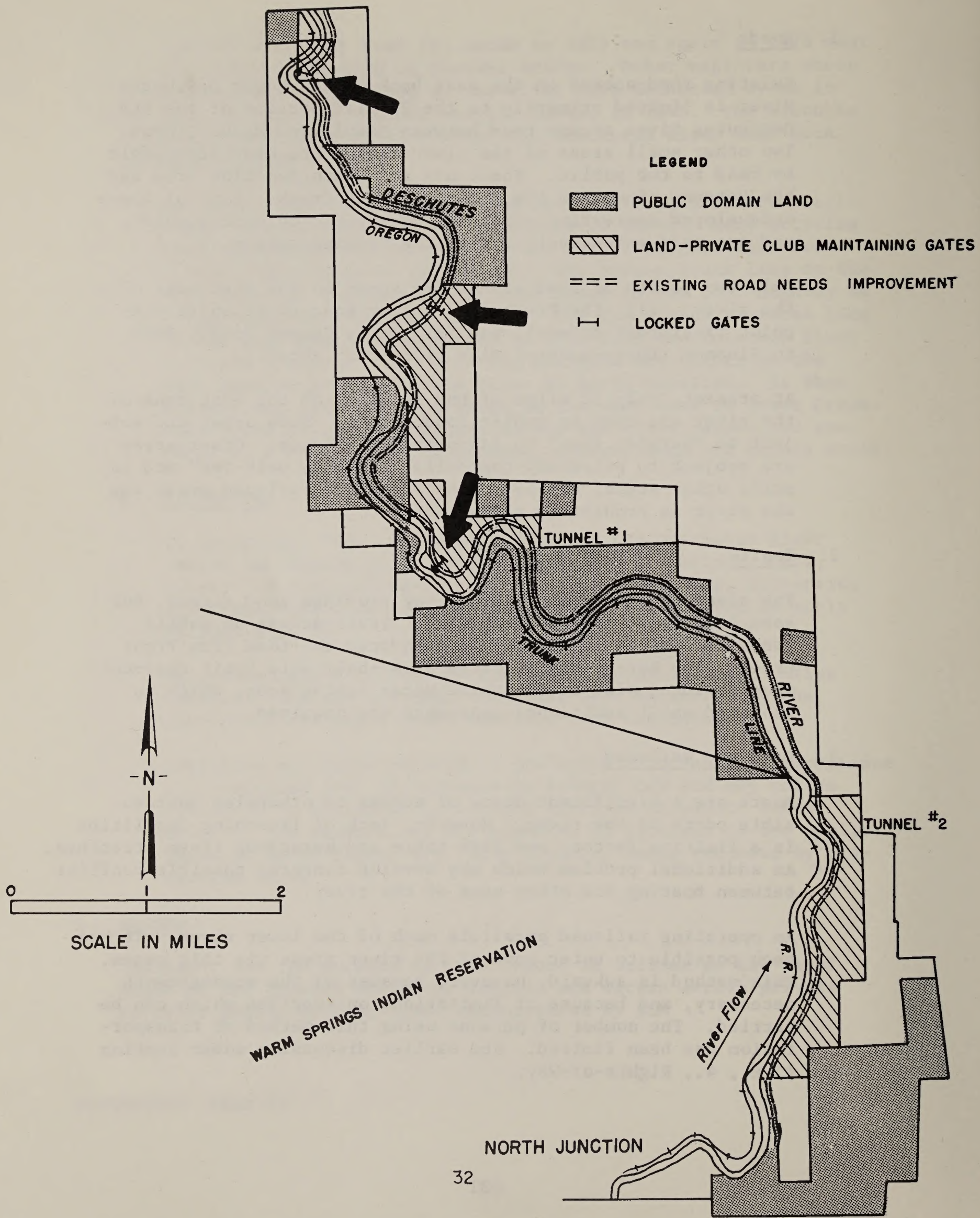
2. Trails

The abandoned railroad right-of-way provides good access, but some additional trails are needed. Trail access on public lands is limited to use of the abandoned railroad from Trout Creek. The Bureau has acquired a one-half mile trail easement from Davidson Flat to the White Horse Rapids area, which is isolated until additional easements are acquired.

3. Boat and Railroad

Boats are a significant means of access to otherwise inaccessible parts of the river. However, lack of launching facilities is a limiting factor, and also there are hazardous river stretches. An additional problem which may develop concerns possible conflict between boating and other uses of the river.

An operating railroad parallels much of the lower river. It has been possible to enter some of the river areas via this means. This method is awkward, however, because of the arrangements necessary, and because of limitations on supplies which can be carried. The number of persons using this method of transportation has been limited. See earlier discussion under Section I, E., 4., Rights-of-Way.



D. ACCESS PROBLEMS

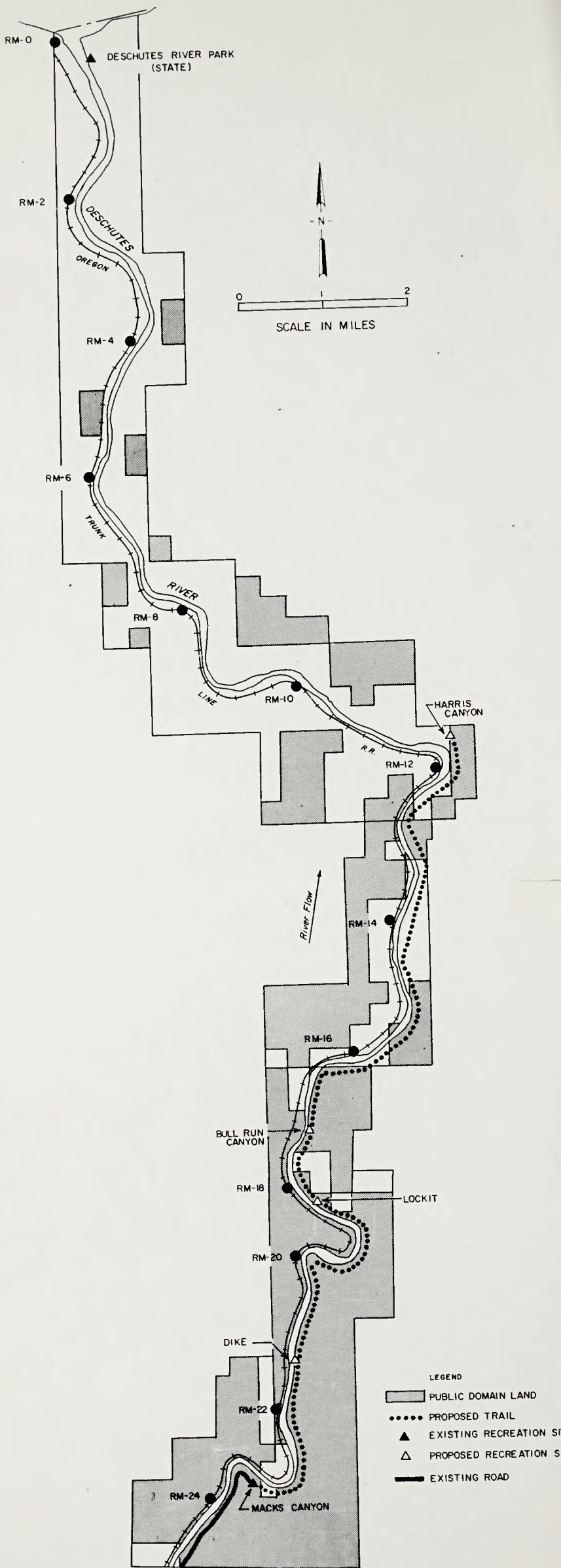
The most important access problem is on a river stretch between Maupin and Kaşkela. Between Maupin and a locked gate seven miles above Maupin access is presently available for the public but could be denied at any time by three different landowners. From the locked gate to North Junction, a distance of 13 miles, the public is denied access to seven miles of public lands, fronting on both banks of the river. The river canyon has steep walls throughout this stretch. The BLM has made engineering feasibility studies of alternates and has concluded that the present road is the only practical means of access through the stretch whether by foot or vehicle. The road traverses four miles of public land on the east bank. Purchase of this road for the public would have the following advantages:

1. The road exists and is used by individuals with private developments inside the blocked area. Closing the road might result in considerable loss to these individuals.
2. It would permit the provision of a total of 58 miles of vehicle access and 38 miles of foot access on the east bank.
3. North Junction, where the road dead ends, includes an excellent recreation site which can be developed for public use. A twenty acre tract on Davidson Flat was donated to the public by The Dalles Rod and Gun Club on condition that road access be provided by 1980. By extending the road a single mile, this site could also be made available to the public.

There are other river stretches where public access to public lands is or may be denied.

SECTION III - DEVELOPMENT OPPORTUNITIES, SHORT TERM

Following is the plan for development of recreation facilities, roads and trails along the river. These proposed developments are expressed in explicit terms. Public comments on location, size, type and degree of developments are encouraged. All suggestions will be fully considered. Those which meet resource development requirements and are found to be in the best interests of the general public ^{will} ~~can~~ be incorporated into this plan.



Except in a few specified locations, development should be limited to the east bank of the river. The presence of the Burlington-Northern Railroad right-of-way on the west bank, extending from the Columbia River upstream to North Junction (70 miles), seriously limits the potential for recreation facility development on that side of the river. However, a few boater recreation sites of varying size, lying between the river and the railroad, could be constructed and used without conflict with the railroad.

Efforts will be made to coordinate recreation development with the Warm Springs Indian Tribal Council on reservation lands adjacent to the west bank of the river.

In order to specify location of various points on the river we have used "River Miles" as a location device, rather than popular or geographic names. However, for clarity, major features are also named. There are 96 river miles in the Lower Deschutes Area. River Mile One is one mile upstream from the mouth. River Mile 96 is about one mile upstream from the Warm Springs Bridge on U. S. Highway 26.

A. RIVER MILE 0-23, COLUMBIA RIVER TO MACKS CANYON

Interstate Highway 80N crosses the Deschutes River at its mouth. Deschutes State Park is located and adjacent to the freeway on the east bank.

Deschutes State Park provided 5,585 camper nights and 40,748 day visits in 1968 according to the State Parks Division, Oregon Highway Department. It is likely that much of this use was traffic on the freeway and the location on the Deschutes was incidental. The public may not utilize the east bank above the State park because of private land and locked gates.

The river from RM-1 to RM-11 is largely undeveloped except for the operating railroad on the west bank. There is no habitation except the State Park employee at RM-1.

Public use in RM-1 to RM-11 area is slight, public access being available mostly by boat or railroad. There is a one-point county road access on the west bank at Kloan (RM-7) but no public parking is available and private lands surround the right-of-way.

Throughout RM-1 to RM-11, the operating railroad parallels the west bank while the abandoned railroad grade follows the east bank. The abandoned grade is used by a few private vehicles owned by the landowners or with their permission. The grade is maintained to a standard adequate only for the few vehicles which use it. There is no public land frontage from RM-1 to RM-11.

Public ownership in the stretch RM-11 to RM-23 is approximately 75 percent on the east bank. Public use is light, with access by boat or by railroad on the west bank.

The abandoned grade on the east bank would be ideal for foot access, with some improvement. Recreation specialists recommend that this stretch be maintained in near pristine condition with foot trail access to be provided. While in the short term, the trail would dead end at Harris Canyon (RM-11), see later discussion in Section IV--Development Plans-Long Range, concerning integration of this trail into a system reaching the Columbia River.

Present Use Estimates (1968)

Deschutes State Park	-	5,585 camper nights and 40,748 day visits
Railroad and Walk-in	-	500 visits
County Road at Kloan	-	1,000 day visits
Macks Canyon Access	-	1,500 boaters and 500 walk-ins
<hr/>		
Total:		55,408 visits or 22,163 visitor days

Potential Additional Use

Camping Units - 36 Visitor Day Potential - 194,400

Present Development

Only one public recreation facility, Deschutes State Park, has been developed in this segment. In 1963 the Oregon State Highway Department acquired 5.4 acres of land on the east bank, near Interstate Highway 80N, and constructed a 34-unit campground and a 20-unit picnic facility, plus a boat launch ramp.

Development Opportunities

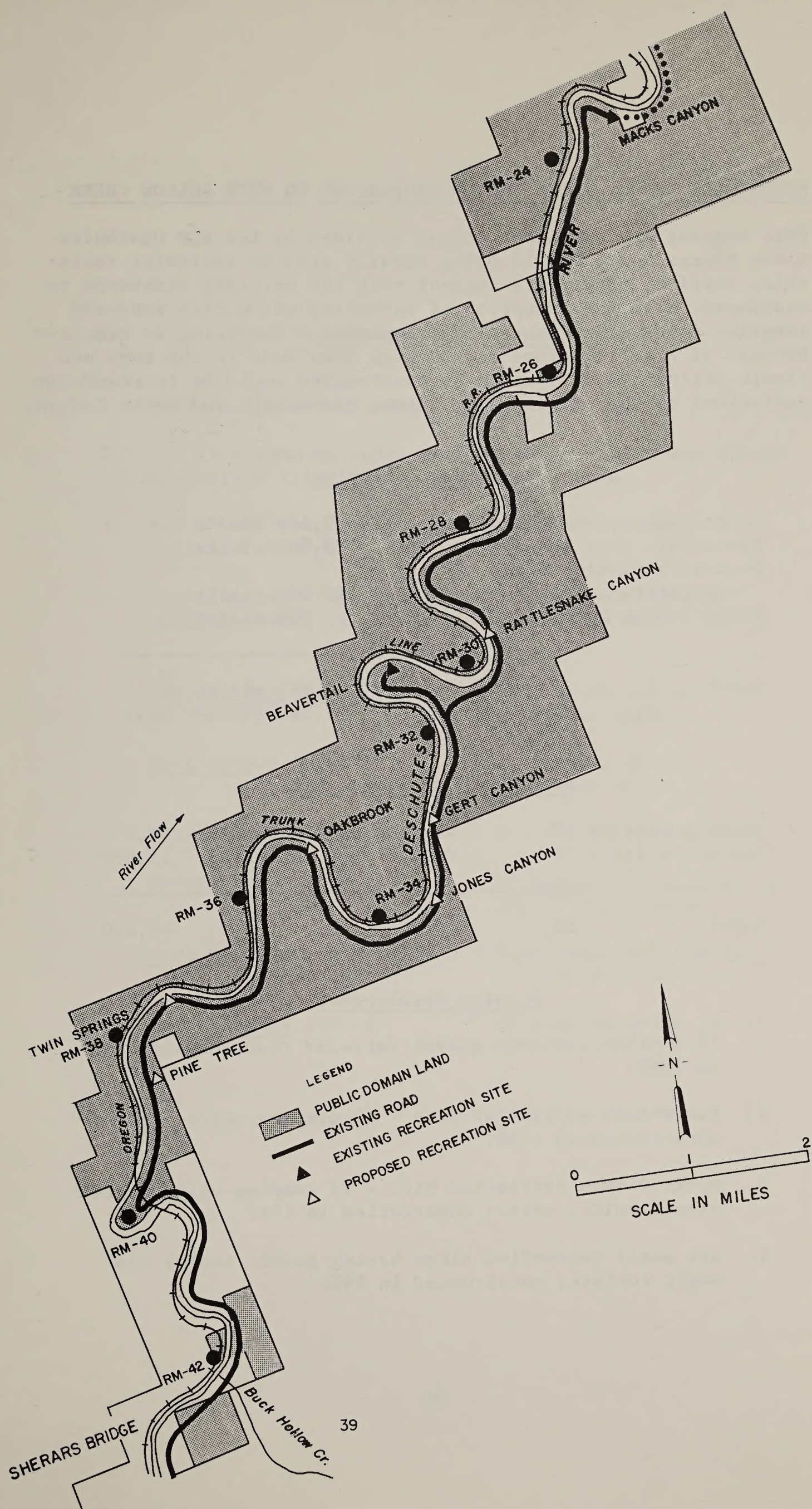
All BLM development in the immediate future listed below is on the stretch from Harris Canyon (RM-11) to Macks Canyon (RM-23).

1. Construct an 11.7 mile foot trail (using the abandoned railroad grade), from Harris Canyon to Macks Canyon Recreation Site.
2. Construct four foot trail and boat access recreation sites containing 36 camping units:

Harris Canyon (RM-11)	-	6 camping units
Bull Run Canyon (RM-16)	-	10 camping units
Lockit (RM-18)	-	10 camping units
Dike (RM-21)	-	10 camping units



This view is typical of the river downstream from Macks Canyon. The operating railroad is on the west bank to the left in the picture. The abandoned grade is on the east bank.



B. RIVER MILE 23-42, MACKS CANYON CAMPGROUND TO BUCK HOLLOW CREEK

This segment has excellent access provided by the BLM Deschutes River Access Road, and is being heavily used by vehicular recreation traffic. Engineers suggest that the existing standards be continued, with the exception of surfacing the access road and interior roads of recreation developments. Surfacing is required because of traffic volume and to keep down dust in the camp and picnic units. Facilities to be constructed would be to standards equivalent to the existing BLM sites, Beavertail and Macks Canyon.

Present Use Estimates

Macks Canyon Site (RM-23)	-	9,110 visits
Beavertail Site (RM-30)	-	9,665 visits
Partially developed and undeveloped sites	-	20,000 visits
Ferry Canyon Road	-	200 visits
<hr/>		
Total:		38,975 visits or 15,590 visitor days

Potential Additional Use

Camping Units - 42	Visitor Day Potential - 33,000
Day-Use Units - 21	Visitor Day Potential - 15,800
<hr/>	
Total: 63	48,800

Present Development

1. 19.2 miles two-lane gravel surfaced road; constructed in 1966.
2. Beavertail Recreation Site - 20 camping units, water; constructed in 1966.
3. Macks Canyon Recreation Site - 13 camping units, three picnic units, water; constructed in 1967
4. Six small recreation sites having picnic tables and vault toilets; constructed in 1966.

Development Opportunities

1. Apply asphalt surfacing of existing road.
2. Add five camping units and a boat ramp at Macks Canyon Recreation Site; oil interior site roads.
3. Add a boat ramp at Beavertail Recreation Site; oil interior site roads.
4. Construct six recreation facilities containing 37 camping units, 21 picnic units, and one boat ramp.

Rattlesnake Canyon (RM-29) - 5 camping units,
2 picnic units

Gert Canyon (RM-32) - 2 camping units,
4 picnic units

Jones Canyon (RM-33) - 10 camping units, water

Oakbrook (RM-35) - 15 picnic units, parking
for 20 cars, water

Pine Tree (RM-39) - boat ramp, parking for
10 cars with trailers

Twin Springs (RM-38) - 20 camping units, water



Macks Canyon Recreation Site is a boat launching point for both upstream and downstream fishermen.



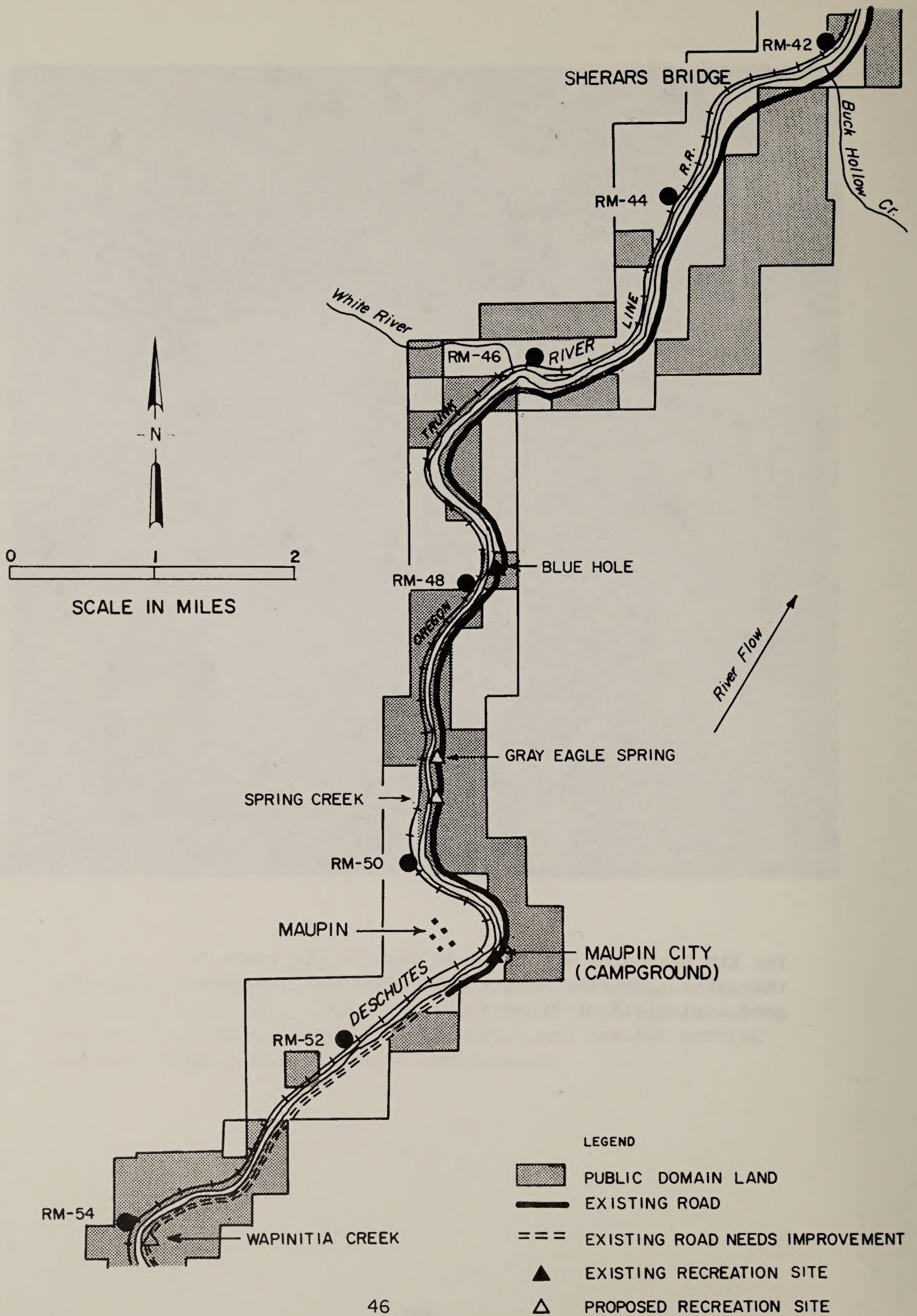
Cedar Island, about one-quarter mile downstream from Beavertail Recreation Site. It has an unusual stand of incense cedar and a large rookery of Great Blue Heron.



Beavertail Recreation Site is located about 10 miles north of Sherars Bridge. BLM, which constructed and operates the site, has received many comments on its unique and restful setting and its harmony with the river environment.



The BLM Deschutes River access road is the route to this site. Fencing of the Beavertail has provided a good ecological study area.



C. RIVER MILE 42-50, BUCK HOLLOW CREEK TO MAUPIN

This segment has excellent access, with the BLM Deschutes River Access Road following the east bank from Maupin to Sherars Bridge. No changes in standards are anticipated with recreation facilities equivalent to those in present BLM sites along the Deschutes Access Road.

Present Use Estimates

This stretch is presently the most intensively used per mile of any river segment.

Sherars Bridge area - 32,535 visits

Bakeoven area - 42,930 visits

Maupin Park - 3,000 camper nights and
9,000 day use visits

Total: 84,465 visits
33,786 visitor days

Potential Additional Use

Camping Units - 25	Visitor Day Potential - 10,800
Day Use Units - 18	Visitor Day Potential - 2,200

Total: 43 13,000

Present Development

1. A two-lane gravel surfaced road was constructed by BLM in 1966. The 8.0 Mile road parallels the east bank from Sherars Bridge to the Bakeoven County Road at Maupin. The road was asphalt-surfaced in 1969. Minimum facilities (tables and pit toilets) have been constructed at three sites along the road.

2. A fishing ramp and toilets for handicapped people have been constructed at Blue Hole. Labor and materials have been contributed by the Western Rod and Reel Club. The site and maintenance are provided by BLM.
3. A 20-unit camping and 10-unit picnic area has been developed by the City of Maupin at the mouth of Bakeoven Creek. The site has water, pit toilets, graveled boat ramp, and a community building of wood construction.

Development Opportunities

1. Construct, or add to, four recreation sites, consisting of 25 camping units, 18 picnic units, 1 boat ramp:

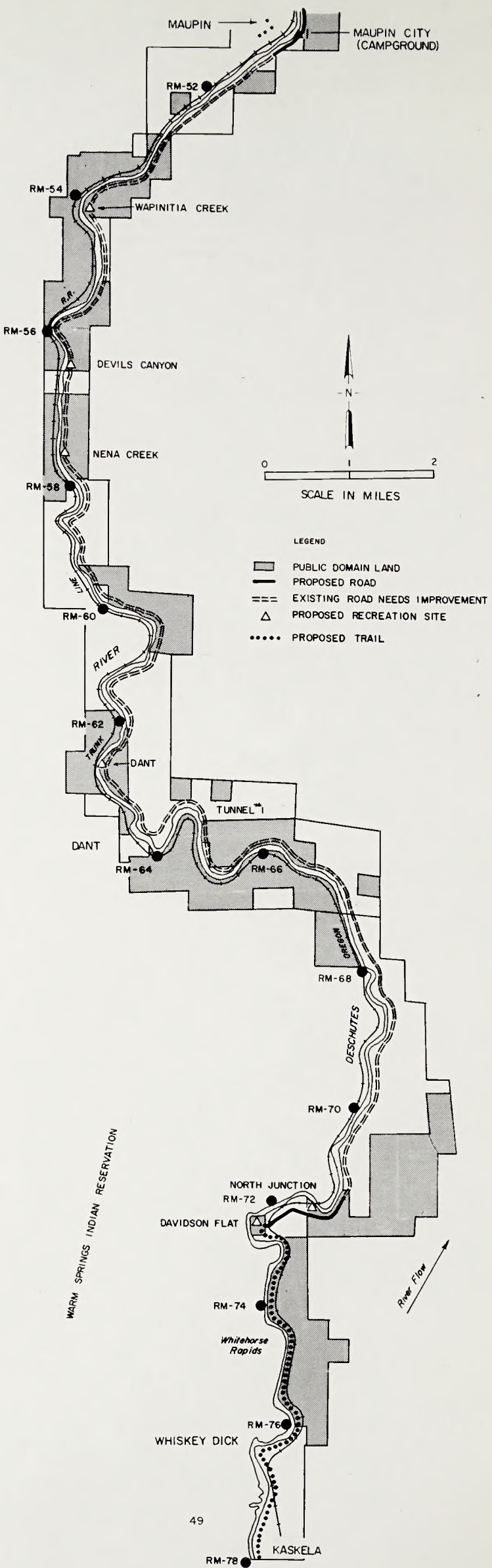
Add to Blue Hole Handicapped Site (RM-47) - 4 picnic units,
boat ramp

Gray Eagle Spring (RM-49) - 10 camping units, 4 picnic
units

Spring Creek (RM-49) - 15 camping units, 5 picnic units

Oasis (RM-50) - 5 picnic units, parking for 15 cars.

2. Reconstruct Bakeoven Guard Station and use for a storage, maintenance, and operation site.
3. Cooperate with Wasco County to provide recreation facility maintenance on private lands near Sherars Bridge.



D. RIVER MILE 50-77, MAUPIN TO KASKELA

This is the segment offering the most potential for public recreation use. Over 40 percent of the river frontage is public land.

The opportunities for this segment range from moderately intensive development to preservation of certain areas in their present undeveloped condition. There is existing 20 miles of usable road from Maupin (RM-50) to North Junction (RM-70). However, 13 miles of this road are privately controlled upstream from a point seven miles above Maupin at a locked gate (RM-57). The existence of this road affects opportunities since it is inconsistent for trail access. See discussion of this problem in Section II, C., "Access Problems".

Present Use Estimates

Maupin (RM-50) to Locked Gate at (RM-57)	- 50,000 angler days 5,000 visits
Locked Gate to Kaskela (RM-77)	- 5,000 visits
By Railroad to Davidson (RM-71)	- 300 visits
<hr/>	
Total:	10,300 visits 50,000 angler days--or 54,120 visitor days

Potential Additional Use

Camping Units - 46	Visitor Day Potential - 35,500
Day-Use Units - 25	Visitor Day Potential - 9,700
<hr/>	
Total:	71 45,200

Present Development

There is no public recreation development in this segment. Several deeds and easements have been acquired for both road and trail public access. Two tracts of private property have been acquired by BLM.

Development Opportunities

It is proposed to obtain public access and improve 20 miles of existing road from Maupin to North Junction and obtain public access and construct one mile of new road from North Junction to Davidson Flat.

This action would provide public access to all 11.0 miles of public land river frontage along the east bank in this segment. The following BLM efforts would be required:

1. Improve 20 miles of existing road from Maupin to North Junction on the abandoned railroad grade.
2. Construct one mile new road from North Junction to Davidson Flat.
3. Construct three miles of trail from Davidson Flat to Whiskey Dick. This trail segment would connect with the proposed trail from Jersey School, forming a through trail between road access points at Davidson Flat and Jersey School.
4. Construct six recreation sites which will include 25 picnic units, 46 camping units, parking for 60 cars and one boat ramp:

Wapinita Creek (RM-53)	-	5 picnic units, parking for 10 cars
Devils Canyon (RM-55)	-	6 camping units
Nena Creek (RM-56)	-	parking for 20 cars
Dant (RM-61)	-	parking for 30 cars
North Junction (RM-70)	-	20 picnic units
Davidson Flat (RM-71)	-	40 camping units



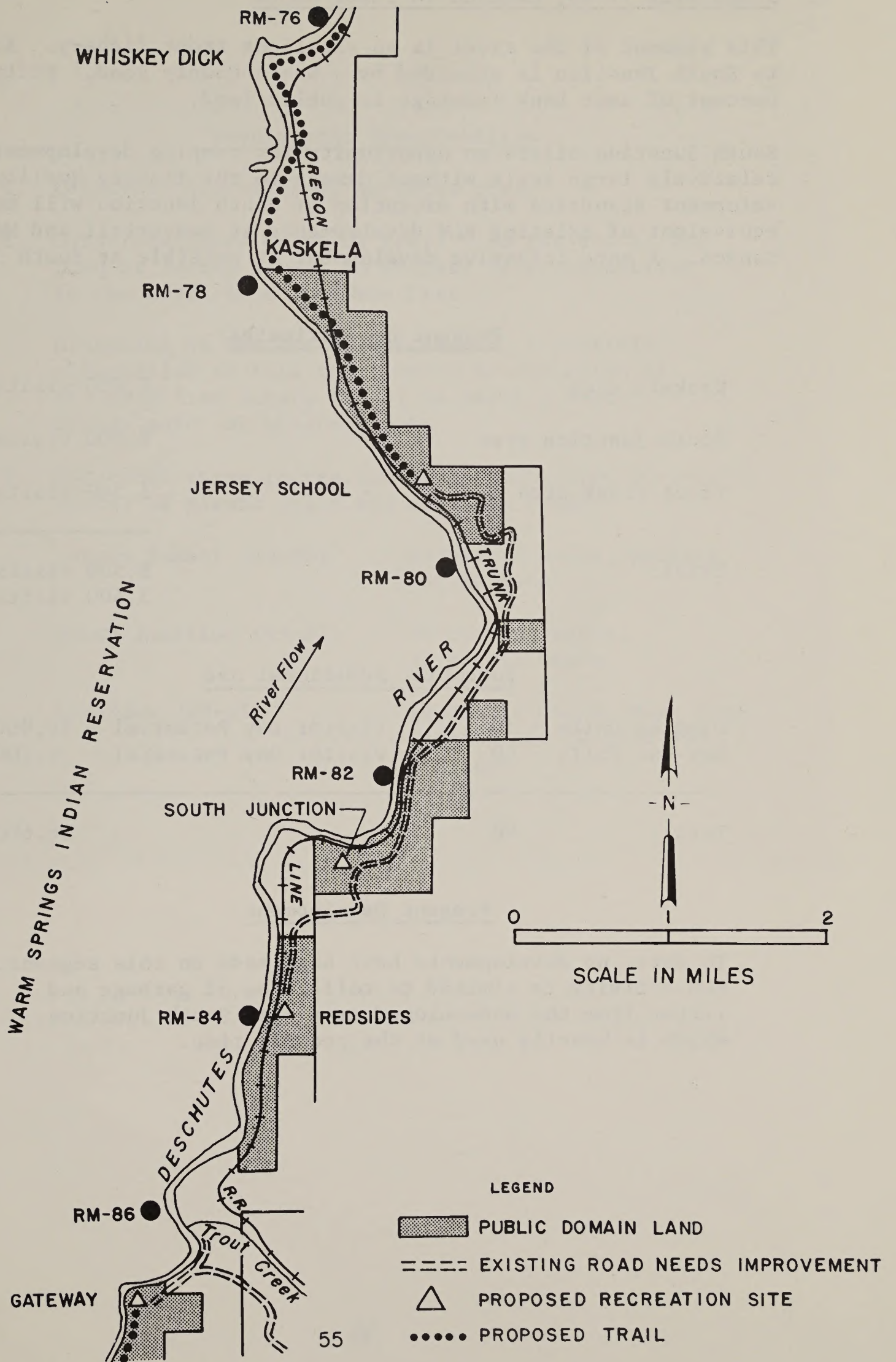
This is North Junction where the two railroads converged 70 miles from the Columbia. The cabins in the picture are on private land.



Davidson Flat. Twenty acres on the flat were donated to the public by The Dalles Rod and Gun Club on condition that road access be provided.



Foot access only is proposed for the three mile long Whitehorse Rapids, immediately upstream from Davidson Flat.



E. RIVER MILE 77-85, KASKELA TO TROUT CREEK

This segment of the river is an excellent trout fishery. Access to South Junction is provided by a Wasco County Road. Fifty-four percent of east bank frontage is public land.

South Junction offers an opportunity for camping development on a relatively large scale without damage to the fishery quality. Development standards with exception of South Junction will be the equivalent of existing BLM developments at Beavertail and Macks Canyon. A more intensive development is possible at South Junction.

Present Use Estimates

Kaskela area	-	1,000 visits
South Junction area	-	6,000 visits
Trout Creek area	-	1,500 visits
		<hr/>
Total:		8,500 visits or 3,400 visitor days

Potential Additional Use

Camping Units - 50	Visitor Day Potential - 26,900
Day-Use Units - 40	Visitor Day Potential - 9,700
<hr/>	
Total:	90 36,600

Present Development

To date, no developments have been made on this segment. BLM activity is limited to collection of garbage and litter from the undeveloped area near South Junction, which is heavily used at the present time.

Development Opportunities

1. Construct 6.3 miles of surfaced road.
2. Construct three miles of trail from the end of the road at Jersey School to Whiskey Dick, connecting to the trail from Davidson Flat.

Depending on boaters' requirements, a possible alternative to this trail would be extension of the road from Jersey School to serve a boaters' access point at Whiskey Dick.

3. Construct three recreation sites containing 50 camping units, 40 picnic units and one boat ramp:

Jersey School (RM-80) - 15 picnic units, parking for 20 cars

South Junction (RM-82) - 50 camping units, 15 picnic units

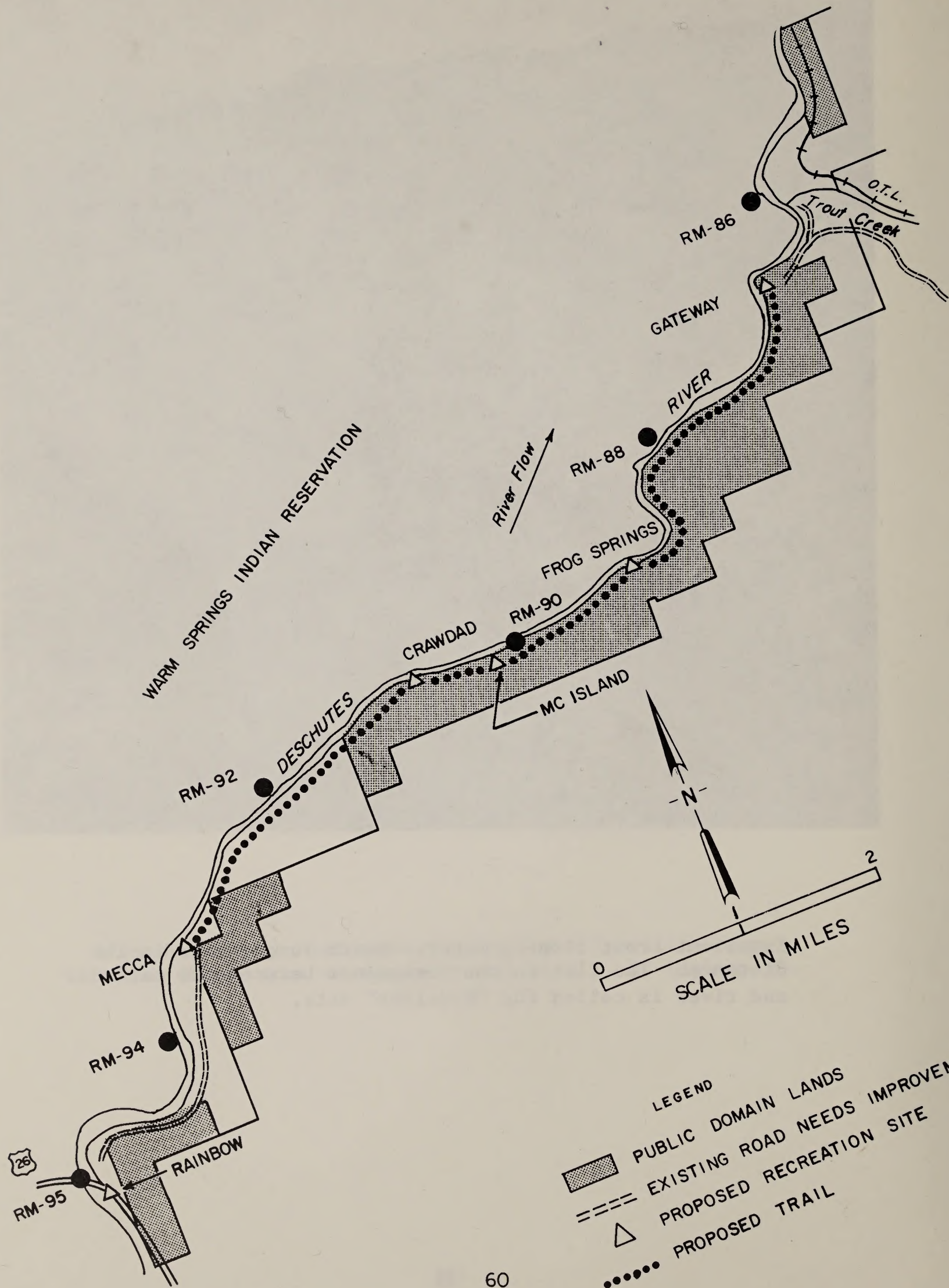
Redsides (RM-85) - 10 picnic units, boat ramp, parking for 10 cars and trailers



A graded county road connects the South Junction-Green Valley Farms area on the Deschutes with U. S. Highway 97.



Excellent trout fishing water. South Junction is in the distance. The flat in the foreground between the railroad and river is called the "Redsides" site.



F. RIVER MILE 85-96, TROUT CREEK TO WARM SPRINGS

This segment also has the abandoned railroad grade along its entire length. U. S. Highway 26 at the upstream end of the segment is the most travelled route crossing the Deschutes with the exception of Interstate Highway 80N at the mouth of the river. Because of excellent access, it is anticipated that user pressure will be greater in this segment than any other.

The Oregon State Game Commission has acquired a tract at the east end of the Warm Springs Bridge (RM-95) known as "Rainbow". At this time heavy use is occurring at some hazard because of lack of acceleration-deceleration lanes on the highway. The opportunities described below would spread this use by providing additional river access.

The terrain in this segment is suitable for a major trail development with terminal recreation sites at each end.

Present Use Estimates

Public access at present is severely limited by private property.

Trout Creek walk-ins	-	4,000 visits
Mecca walk-ins	-	5,000 visits
Boaters from Rainbow area	-	1,000 visits
		<hr/>
Total:		10,000 visits or 4,000 visitor days

Potential Additional Use

Camping Units - 172	Visitor Day Potential - 92,500
Day-Use Units - 75	Visitor Day Potential - 18,400
<hr/>	
Total	247 110,900

Present Development

A forty-acre site near the mouth of Trout Creek (RM-87) has been acquired by BLM. This site is known as "Gateway". Temporary toilet and parking facilities have been installed.

Development Opportunities

1. Construct two miles of surfaced road from the east end of Warm Springs Bridge (RM-95) at Rainbow to Mecca Flats (RM-93). Provide terminal facilities on public land at the end of the road.
2. Construct seven miles of foot trail from Mecca Flats to the Gateway Recreation Site (RM-85).
3. Improve existing road access to the Gateway site.
4. Construct five recreation sites consisting of 72 camping units, 25 picnic units and two boat ramps:

Gateway (RM-85)	-	50 camping units, 15 picnic units, boat ramp, water
Frog Springs (RM-88)	-	6 camping units
MC Island (RM-89)	-	6 camping units
Crawdad (RM-90)	-	10 camping units
Rainbow (RM-95)	-	10 picnic units, boat ramp, parking for 29 cars



This large flat was acquired by BLM for public recreation development. It is the downstream terminus of a seven mile trail with the upper terminus at Mecca Flats.



This flat is known as the "Gateway" recreation site. Juniper and sagebrush dominate the drier sites while the broad-leaved alder takes over along the water's edge. Interesting basalt flows are part of the canyon landscape.



This stretch is downstream from the Warm Springs Bridge. It is typical of much of the area where foot access is proposed.



Mecca Flat is two miles downstream from the Warm Springs Bridge on U. S. Highway 26. It is the upstream terminus of a seven mile foot trail.



This is Warm Springs Bridge on U. S. Highway 26. You are looking south at the upstream end of the 96-mile Lower Deschutes area.

SECTION IV - DEVELOPMENT OPPORTUNITIES, LONG RANGE

Forty-five percent of the frontage on both sides of the Lower Deschutes River is presently in Federal ownership classified for retnetion. Primary recreational development will occur on the east side of the river where 50 percent of the frontage land is in Federal ownership. Including easements and deeded rights-of-way, 61 percent of the land along the east bank of the river is in Federal ownership or control.

The primary resource value of the river is public recreation. Other principal resource uses of the river are presently of relatively low value. The river, while not undeveloped, is sparsely settled, relatively unpolluted, and not industrialized. The enormous growth in recreation pressure to be expected is documented in this report.

Long range opportunities for development in the area include:

1. Scenic easements for lands within an average of one-quarter mile of the river. The existence of communities would be recognized as would all existing uses.
2. Public foot access along all the east bank of the river not now secured or not proposed in Section III - Development Plans, Short Term, of this proposal. Areas presently or to be served by road would not be included.
3. The Bureau would seek to acquire certain tracts of private land for facility development to provide approximately 150 additional family units.

F O O T N O T E S

1. Proposed Water Quality and Waste Treatment Standards for Deschutes River Basin, State of Oregon, Department of Environmental Quality, October 1969, p. 10
2. Sales Management, June 1966, Oregon State University, April 10, 1967, p. 11
3. Resource Analysis, Wasco County, 1966, p. 11
4. Traffic Volume Tables, Oregon State Highway Department, p. 11
5. Summary of National Forest Recreation Use, Region Six, CYs 1965-1968, p. 16
6. The Pacific Northwest - A Study of Economic Growth in a Quality Environment, Battelle Memorial Institute, December 1967, p. 20
7. PNW Economic Base Study for Power Markets, BPA, Vol. II, Part 9, 1967, p. 20
8. Oregon Outdoor Recreation, Third Edition Abstract, Oregon State Highway Department, 1967, p. 20
9. Archeological Research of Site 35SH23, The Mack Canyon Site; University of Oregon, Museum of Natural History, April 14, 1967 p. 29

A D D I T I O N A L R E F E R E N C E S

Climatological Data, U.S. Department of Commerce

Deschutes River Access Plan, Oregon State Game Commission 1-20-69

Deschutes, Little Deschutes and Metolius Rivers Master Plan for Angler Access and Associated Recreational Uses, Oregon State Game Commission, March 1969

Deschutes River Basin, State Water Resources Board, Salem, Oregon, 1961

The History of the Deschutes Club, by Berkeley Snow, 1966

Lower Deschutes River, Oregon, Interagency Recreation Development Plan, State of Oregon, U.S. Government, August 1965 (Unpublished)

Oregon Outdoor Recreation, a study of Non-urban Parks and Recreation, Oregon State Highway Department, 1962

Pacific Northwest Economic Base Study for Power Markets

Volume II, Part 1, Population, 1966

Volume II, Part 2, Labor Force, 1966

U.S. Department of the Interior, Bonneville Power Administration

Resource Analysis, Sherman County, Oregon State University, 1966

The State Park Visitor in Oregon; A Report of the 1964 State Park Travel & Use Study, Oregon State Highway Department

Soil Survey, Deschutes Area, Oregon, U.S. Department of Agriculture Soil Conservation Service, 1958

Soil Survey, Sherman County, U.S. Department of Agriculture, Soil Conservation Service, 1964

Technical Report No. 68-1, Oregon State Highway Department Traffic Volume Table for 1967, July 1968

Where Not to Build, A Guide for Open Space Planning, Technical Bulletin 1, U.S. Department of the Interior, Bureau of Land Management, April 1968

Long Range Program Planning, Wasco County, Resource Analysis, 1966

Resource Analysis, Jefferson County, 1967

Planning for Tomorrow in Sherman County, Oregon, 1967

